REFERENCES AND/OR ACKNOWLEDGEMENTS
Conflict of Interest No conflict of interest.

6ER-025 ANTIMICROBIAL ACTIVITY OF SUBCRITICAL CO2 EXTRACT OBTAINED FROM UNDERGROUND FERULA ASAFOETIDA L

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Background and Importance Literature review showed that various extracts of *Ferula asafoetida* L. have wound healing, anti-inflammatory, antinociceptive, antimicrobial, antitumour, anti-diabetic effects. However, there is a lack of studies regarding CO_2 extracts of *Ferula asafoetida* L. This raises the need for phytochemical and antimicrobial study of this extract.
Aim and Objectives The possibility of creating to consider an antimicrobial preparation based on CO_2 extract of *Ferula asafoetida* L. used in pharmacy practice.
Material and Methods Determination of the constituents of the CO_2 extract of *Ferula asafoetida* L. was done by GC-MS and identified by comparing the obtained spectra with the existing NIST library.
Results GC-MS analysis of the CO_2 extract of *Ferula asafoetida* L. showed that some components of sulfur compounds (34.69%) were in rather high concentrations. In the course of the studies, the minimum inhibitory concentrations (MIC) of the CO_2 extract of *Ferula asafoetida* L. were determined by the method of serial dilutions in liquid nutrient medium: *Staphylococcus aureus* 7.81 μg/*ml*, *Bacillus subtilis* 31.25 μg/*ml*, *Escherichia coli*, *Klebsiella pneumoniae*, *Salmonella enterica* 15.63 μg/*ml*, *Candida albicans*, *Aspergillus niger* 62.5 μg/*ml*. In the second method, the CO_2 extract of *Ferula asafoetida* L. is more active than the comparison drug amoxicillin against *Staphylococcus aureus* and spore bacterium *Bacillus subtilis* by 1.2-fold, *Escherichia coli* by 1.5-fold and *Salmonella enterica* by 1.4-fold. And also this extract showed fungicidal activity against *Candida albicans* 1.5 times more than fluconazole.
Conclusion and Relevance The wide range of antimicrobial properties of the CO_2 extract of *Ferula asafoetida* L. is associated with the presence of sulfur compounds in its chemical composition. As a result of comparing the antimicrobial activity of this extract with literature data, we found that the antimicrobial activity of CO_2-extract of *Ferula asafoetida* L. is higher than that of polar extracts of this plant, and that of essential oils it is higher against *Escherichia coli* and *Bacillus subtilis*. In view of the above, the CO_2-extract of *Ferula asafoetida* L. can be used in pharmaceutical practice as a medicinal herbal remedy with antimicrobial action.

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6ER-026 THE IMPORTANCE OF PHARMACY DEPARTMENT CLINICAL TRIALS UNIT INTERVENTION IN A REFERENCE CENTRE FOR THE TREATMENT OF PARAMYLOIDOSIS

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Background and Importance As a reference centre for the treatment of familial paramyloidosis, our hospital receives patients from all over the country.[1] The emergence of new therapeutic options is essential to ensure treatment and reduce the impact that the disease has on individuals and families.

Clinical Trials (CT) using new molecules such as tafamidis, inotersen and patisiran represent significant advances in the treatment of patients with Hereditary Transthyretin Amyloidosis (hATTR), instead of liver transplant.[2]
Aim and Objectives Describing the activity of the Pharmacy Department Clinical Trials Unit (PDCTU) in a reference centre for the investigation and treatment of hATTR, between 2006 and 2023.
Material and Methods Retrospective analysis of the participation of the PDCTU of our hospital in the clinical investigation of hATTR. For this analysis, the number of CT started each year, the number of ongoing CT and the number of patients included in CT associated with hATTR were evaluated.
Results Since 2006, our PDCTU has participated in 21 CT. It has made a significant contribution to the approval of emerging therapies, some of which have already been granted Marketing Authorisation, as is the case of transthyretin (TTR) stabilisers and TTR level reducing agents.

In total, since 2006, 327 patients have taken part in hATTR-related CT, 64 of whom are still taking part in a set of 6 CT, all of them of phase 3.

Each trial associated with hATTR had an average participation of eight patients, an average well above the average of patients/trial (two patients/trial) at our centre.
Conclusion and Relevance Since 2015 there has been a growing trend in the inclusion of hospital in new CT. The centre is evaluating various investigational therapies for the treatment of hATTR, including agents that stabilise TTR, antibodies, antisense oligonucleotides and RNAi therapies.

The pharmacists at the PDCTU, contribute to the development and approval of new therapeutics, guidelines and protocols. Since they are responsible for the entire investigational product circuit, they ensure that trials are well conducted.

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